

# Service Bulletin

JULY 2006

REFRIGERATORS

REF 05-06

## CHANGE FROM SEPARATE CUSTOMCOOL AC AND DC HARNESS INTO SINGLE COMBINED AC-DC HARNESS

The new CustomCool harness combines currently separate AC and DC harnesses into a single AC-DC harness. The reason for this change main board design has changed in terms of better performance in regard to electromagnetic interference. In combining the AC and DC harnesses of the CustomCool, there no change in the performance of the unit with regard to EMI; this was validated with repeated EMI tests with the new configuration of the CustomCool harness.

In service situations with CustomCool harness:

### Situation 1

If a model manufactured prior to "TC" nomenclature comes for service with requirement of AC harness (**WR23X10284**) or DC harness (**WR23X10202/WR23X10237**) replacement we need to replace with the same parts.

### Situation 2

If a model manufactured from "TC" nomenclature with separate AC harness (**as cataloged**) or DC harness (**as cataloged**) comes for service with requirement of either AC or DC harness replace with new combined harness (**as cataloged**).

### Situation 3

If a model manufactured starting "TC" nomenclature or above with combined CustomCool AC-DC Harness comes for service replace with new harness of the same part number as on that unit.

The following sheets of service procedure address only **Situations 2 and 3**.



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# COMBINED AC-DC HARNESS INSTALLATION INSTRUCTIONS FOR PLASTIC LINER CUSTOMCOOL MODELS WITH UNI-DAMPER

\*\*\*Steps 1-7 and 13-21, 23-25 apply to all, Steps 8-12, 22 are model-specific.

1. Unplug the Refrigerator and disconnect the main water line.
2. Unscrew 3 screws in the FF side and 1 screw in the FZ side to loosen the CustomCool assembly.

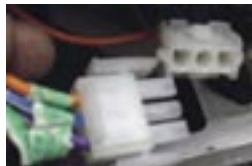


FF Side (3 Screws)

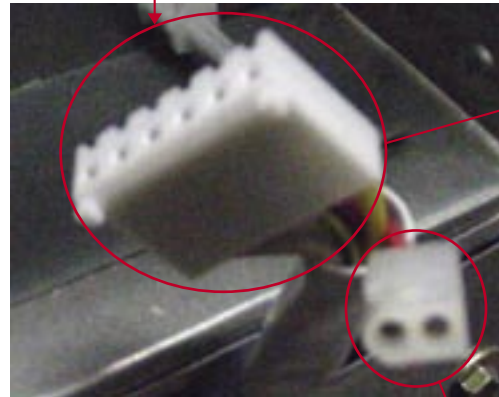


FZ Side (1 Screw)

3. Unscrew 7 screws then disassemble access cover.
4. Unscrew 8 screws then disassemble the main board cover.
5. Unscrew the ground connection on the case back and unplug the 3 pin male connector in the Hi Side area.



6. Unplug the CustomCool fan 2 pin connector and damper board connection on the main board. The correct connectors are identified coming out of the Sleeve as Shown.



Damper Board Connection

CustomCool Fan Connection

7. Unscrew 2 wire ties to remove the DC wires outside the Hi-side assembly.



Above the compressor



In between compressor and condenser fan

**For dual evaporator models: (only dual evaporator models will have drain tube)**

8. Disassemble the drain tube to aid for easy removal of the grommet in the steps below.



9. Disconnect the water line.



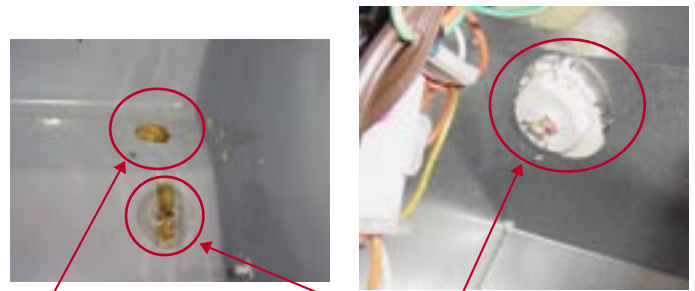
- 9A. Below the FZ door disconnect transparent white tube, which goes to the water filter.



- 9B. On the water valve disconnect the white transparent tube coming from the water filter

**For models with separate CustomCool AC and DC harness: (can be identified by 2 separate grommets in the FF compartment behind the quick chill pan)**

10. From inside the FF compartment pull the AC harness grommet.  
11. Cut the wires on both sides of the DC grommet and leave it in place as shown below.



AC Harness Grommet

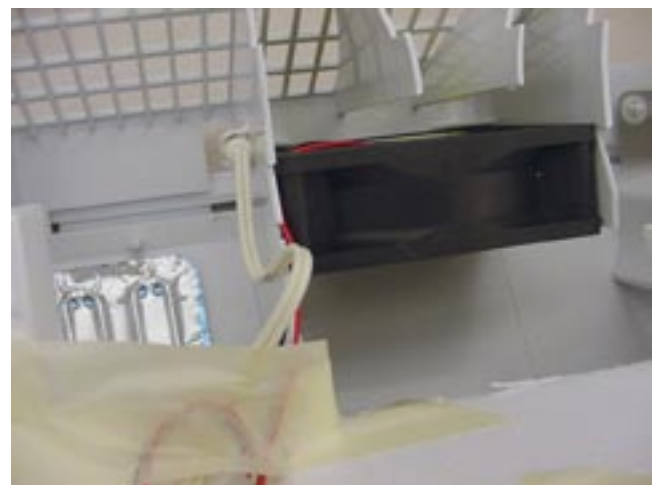
DC Harness Grommet

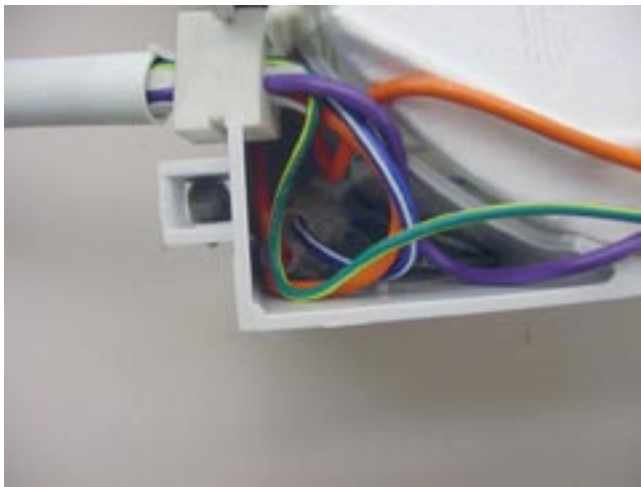
**For models with combined CustomCool AC-DC harness: (can be identified by Just 1 grommet in the FF compartment behind the quick chill pan)**

12. From inside the FF compartment pull the combined AC-DC harness grommet out, along with the water tubes going to the filter.

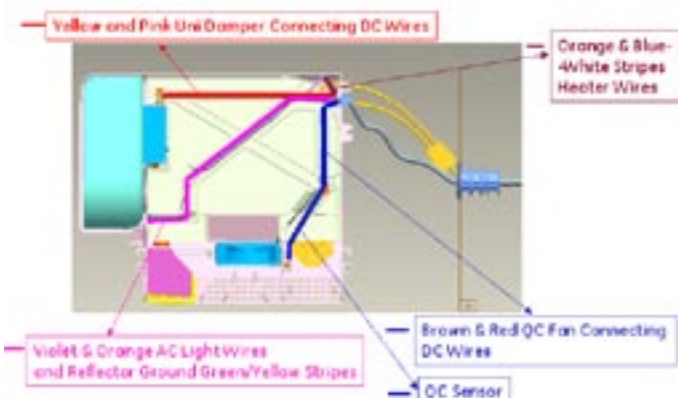


13. Open the top cover and unplug the CustomCool fan, Damper, reflector ground, heater inside the CustomCool assembly.  
14. Disassemble the light socket and sensor.





15. Assemble the new AC-DC harness and do the connections to CustomCool fan, damper, and reflector ground, heater and assemble the light socket and sensor in their positions and then close the top cover.



16. Insert the CustomCool harness grommet in the top hole and assemble the quick chill assembly in its place using 3 screws in FF side and 1 screw on FZ side as shown in Step 2.

17. Pull all wires through the hole in the Hi-side and bring the Grommet into position as shown in step 11.
18. In the Hi-Side area connect 3 pin male connector to 3 pin female connector in the cab harness and screw the ground wire on to the case back picture as shown in step 5.
19. Take the DC fan and damper wires towards the main board and hold them in position using 2 wire ties as shown in step 7.
20. Plug in the 2 pin female fan connector to 2 pin male connector on the main board and also connect the damper board connection on to the main board as shown in step 6.
21. Pass the water tubes back through the AC grommet reconnect them to water valve and the blue connector below the FZ door as shown in 9.A and 9.B. Also reconnect the main water line to the water valve.

### For Dual Evaporator Models:

22. Assemble the Drain tube back on.

### FOR ALL MODELS:

23. Assemble the main board cover and access cover back using the screws removed in steps 3 and 4.
24. Final Checkpoints:
  - (i) Make sure to assemble the drain tube correctly so that there will not be any water leakage, also the water tubes need to firmly connected.
  - (ii) Plug in the unit and make sure the water dispenser is working correctly and that there is no water leakage.